WHAT IS CLAIMED IS:

1. A method of using wastewater in the processing of fuels for a high temperature fuel cell, comprising the following steps:

a) using as said fuels a liquid hydrocarbon fuel,

b) processing said water by one or more steps of filtration, reverse osmosis, and cleaning to produce prepared water,

c) emulsifying said liquified hydrocarbon fuel with said prepared water to form an emulsion as fuel for said high temperature fuel cell.

2. The method of claim 1, further comprising a step of cracking said liquid hydrocarbon fuels to convert an initial long hydrocarbon chain bond into a shorter hydrocarbon chain bond, and performing said cracking step as an electrochemical and thermal catalytic step.

3. The method of claim 1, further comprising the step of catalytically withdrawing sulfur and sulfur compounds including hydrogen sulfide form said emulsion prior to using said emulsion as fuel.

4. The method of claim 1, further comprising supplying said hydrocarbon fuel and said wastewater into a common container and then performing said emulsifying step by

exposing said prepared water and said liquid hydrocarbon fuel to a sound vibration in said common container.

5. The method of claim 4, wherein said step of exposing is performed by introducing said liquid hydrocarbon fuel and said prepared water into said common container directly in front of an ultra-sound vibrator.

6. The method of claim 5, further comprising feeding variable quantities of said prepared water and said hydrocarbon fuels into said common container.

7. The method of claim 1, wherein said step of emulsifying is performed continuously.

8. The method of claim 1, further comprising monitoring said emulsifying step for providing information regarding said emulsion and using said information for controlling process steps for producing said emulsion.

9. The method of claim 1, further comprising starting said high temperature fuel cell with $CH_4$ (methane, natural gas) as fuel until an operating temperature of said fuel cell has been reached, and then switching over said fuel cell to receive said emulsion as its fuel.

10. The method of claim 9, further comprising performing said switching over continuously in an overlapping and stepless manner, whereby emulsion and $CH_4$ are used together as fuel.

11. The method of claim 1, further comprising the step of dosing said prepared water and said hydrocarbon fuel through positive feed dosing pumps which do not permit any backflow.

12. The method of claim 11, further comprising electronically controlling said positive-feed dosing pumps in a closed loop manner in response to performance parameters of the high temperature fuel cell or in response to emulsion quality parameters.

13. The method of claim 12, further including in said electronically controlling step a switch-off function for shutting down the supply of hydrocarbon fuel in response to an emergency.

14. The method of claim 2, wherein said cracking step is performed inside a separate housing which is positioned inside an enclosure of said high temperature fuel cell.

15. The method of claim 14, further comprising using thermal energy of said high temperature fuel cell for performing said cracking step.

16. The method of claim 3, further comprising performing said step of catalytically withdrawing sulfur and sulfur compounds including hydrogen sulfide in a separate housing which is positioned inside an enclosure of said high temperature fuel cell.

17. The method of claim 16, further comprising using thermal energy of said high temperature fuel cell for performing said withdrawing step for desulfurizing said emulsion.

18. The method of claim 3, further comprising performing said step of catalytically withdrawing sulfur and sulfur compounds including hydrogen sulfide, by chemically binding said sulfur and sulfur compounds including hydrogen sulfide to form stable compounds and avoiding discharging said stable compounds into the atmosphere.

19. The method of claim 1, further comprising performing, directly following said emulsifying step, an electrochemical process for cracking or separating molecular bindings of organic compounds of said emulsion.

20. The method of claim 19, wherein said electrochemical process is performed by passing said emulsion through an electric gap to subject said emulsion to a gap-electrolysis process.

21. The method of claim 20, further comprising forming said electric gap between two electrically conducting cylindrical members arranged concentrically one within the other, connecting one cylindrical member to a positive pole of a d.c. power source and connecting the other cylindrical member to a negative pole of said d.c. power source.

22. The method of claim 21, comprising using two pipes as said electrically conducting cylindrical members, arranging said two pipes concentrically to each other, and connecting said two pipes to said high temperature fuel cell as said d.c. power source.

23. The method of claim 20, further comprising measuring an electrical conductivity of said emulsion and then performing said gap-electrolysis when said electrical conductivity of said emulsion is at least 600 $\mu$S.

24. The method of claim 21, wherein said d.c. power source provides a voltage of about 10 volts for starting said cracking of said molecular bindings of said organic compounds of said emulsion.

25. The method of claim 1, further comprising using kerosene as said liquid hydrocarbon fuel.